

Remarks

This Application has been carefully reviewed in light of the final Office Action mailed June 16, 2004. Applicants believe all pending claims are allowable over the references cited by the Examiner without amendment and respectfully provide the following remarks. Applicants respectfully request reconsideration and allowance of all pending claims.

I. Rejections under 35 U.S.C. § 103(a)

A. The Proposed *Mahapatro-Dietrich-Miller* Combination Fails to Disclose, Teach, or Suggest Various Limitations Recited in Applicants' Claims

The Examiner rejects Claims 1-45 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,571,215 to Mahapatro ("*Mahapatro*") in view of U.S. Patent 5,548,518 to Dietrich et al. ("*Dietrich*"), and further in view of U.S. Patent 5,408,663 to Miller ("*Miller*"). Applicants respectfully disagree and discuss independent Claim 1 as an example.

In general, *Mahapatro* is directed to a system for generating a schedule by generating assignments for the tasks of a project and sequentially scheduling the individual assignments to available resources. (Abstract) The system disclosed in *Mahapatro* receives information concerning the resources and the tasks. (Column 5, Lines 15-16) The tasks may be associated with constraints such as an identification of the resources assigned to the task and scheduling constraints (e.g., the date by which the task must be completed). (See Abstract and Column 6, Lines 33-40) The information concerning the resources and tasks is used to generate assignments, which can be individually scheduled to a resource, and a resource calendar that identifies available time slots for each resource. (Column 5, Lines 16-20) Next, the assignments are sequentially scheduled into available time slots for the various resources assigned to the project. (Column 5, Lines 20-22) According to *Mahapatro*, the resulting schedule is balanced and maximizes the utilization of the available resources. (Column 5, Lines 22-23)

In contrast, Claim 1 recites:

A method for scheduling development planning for *a plurality of products of an enterprise*, comprising:
receiving a list of *a plurality of products* to be developed;

receiving a list of required completion dates, each completion date specifying the completion date for the development of ***a corresponding product in the plurality of products***;

receiving, ***for each product in the plurality of products***, a project definition of a project for developing the product, each project definition defining:

a plurality of tasks required to complete a project for developing the product associated with the project definition; and

a list of resources required to complete each task defined in the product definition, ***at least one of the plurality of tasks for at least one of the plurality of projects requiring a material to be provided by an outside party distinct from the enterprise***;

receiving a list of available resources, each resource in the list of available resources having a capacity as a function of time;

receiving a list of materials available from outside parties distinct from the enterprise and a schedule of availability of the materials available from the outside parties; and

automatically generating a schedule ***comprising all tasks for all projects***, the schedule ***allocating the resources such that each resource is allocated at a level less than or equal to its capacity***, the schedule also ***scheduling tasks that require materials from outside parties at a time when such materials will be available***.

Mahapatro, whether considered alone or in combination with *Miller* and *Dietrich* fails to disclose, teach, or suggest various limitations recited in Claim 1.

For example, *Mahapatro* fails to disclose, teach, or suggest “receiving a list of ***a plurality of products*** to be developed,” as recited in Claim 1. *Mahapatro* apparently discloses merely generating a schedule for completing tasks of a *single project*. The cited portions of *Mahapatro* do not make any mention of “a plurality of products,” as recited in Claim 1. In general, it is more complex to generate a schedule for a plurality of products and tasks as recited in Applicants’ Claim 1 than for the *single project* as disclosed in *Mahapatro*. Both *Dietrich* and *Miller* fail to make up for this deficiency of *Mahapatro* and thus the proposed *Mahapatro-Dietrich-Miller* combination is insufficient to support these rejections.

In response to similar arguments presented by Applicants in the previous Response, the Examiner states that the “Examiner does not give this limitation patentable weight.” Applicants respectfully note that to establish a *prima facie* case of obviousness, three basic criteria must be met. One of these requirements is that the prior art reference (or references when combined) ***must teach or suggest all the claim limitations***. M.P.E.P. § 2142 (emphasis added); *see also*

M.P.E.P. § 2143.03. “**All words in a claim must be considered** in judging the patentability of that claim against the prior art.” M.P.E.P. § 2143.03 (emphasis added). Thus, Applicants respectfully submit that the Examiner must give patentable weight to all limitations in Claim 1 relating to the plurality of products. Furthermore, Claim 1 recites “**receiving a list of a plurality of products to be developed**” as an explicit step of the method to which Claim 1 is directed.

The Examiner further states, “The claims are directed to scheduling development planning for a (singular) product in a group of products.” Applicants respectfully submit that the Examiner apparently mischaracterizes Claim 1. In particular, Claim 1 clearly recites a “method of scheduling development planning **for a plurality of products of an enterprise**.” The Examiner further states, “The fact that the product is part of a group of products does not affect the schedule generation.” Applicants respectfully disagree. As Applicants noted above, in general, it is more complex to generate a schedule for a plurality of products and tasks as recited in Claim 1 than for the *single project* as disclosed in *Mahapatro*.

The Examiner further states, “The claims are written in such a way that all of the limitations are directed to gathering information about a single product and generating a schedule then repeating for another single product and compiling all the schedules.” First, Applicants respectfully submit that the Examiner is paraphrasing and, in some cases, mischaracterizing Claim 1. Second, Claim 1 plainly recites, in part:

- receiving a list of **a plurality of products** to be developed;
- receiving **a list of required completion dates, each completion date** specifying the completion date for the development **of a corresponding product in the plurality of products**;
- **receiving, for each product in the plurality of products, a project** definition of a project for developing the product, **each project definition** defining:
 - a plurality of tasks required to complete a project for developing the product associated with the project definition; and
 - a list of resources required to complete each task defined in the product definition, at least one of the plurality of tasks for at least one of the plurality of projects requiring a material to be provided by an outside party distinct from the enterprise;
- automatically generating a development schedule **comprising all tasks for all projects**, the development schedule allocating the resources such that each resource is allocated at a level less than or equal to its capacity, the development

schedule also scheduling tasks that require materials from outside parties at a time when such materials will be available.

Claim 1 clearly involves scheduling development planning for a plurality of projects (each project for a product in the plurality of products), and the Examiner has explicitly acknowledged that the limitations of Claim 1 relating to the plurality of products were not given patentable weight by the Examiner. Applicants respectfully submit that the Examiner's failure to give patentable weight to all limitations recited in Claim 1 is improper, that the Examiner must consider these limitations, and that *Mahapatro*, *Dietrich*, and *Miller* all fail to disclose, teach, or suggest the plurality of products or generating a development schedule for all products in the plurality of products.

As another example, *Mahapatro* fails to disclose, teach, or suggest "receiving a list of required completion dates, *each completion date specifying the completion date for the development of a corresponding product in the plurality of products*," as recited in Claim 1. *Mahapatro* merely discloses receiving a scheduling constraint for each of the tasks of a project, specifying a date by which the task must be completed. (See Column 6, Lines 37-40) First, because *Mahapatro* fails to disclose, teach, or suggest "*the plurality of products*" recited in Claim 1 as discussed above, *Mahapatro* necessarily fails to disclose, teach, or suggest "each completion date specifying the completion date for the development of *a corresponding product in the plurality of products*," as recited in Claim 1. Second, even assuming for the sake of argument that the project in *Mahapatro* could be equated with even a single product in the plurality of products recited in Claim 1, *Mahapatro* would still only teach receiving dates by which *the tasks* of the project must be completed as recited in Applicants' Claim 1 rather than by which the project must be completed as disclosed in *Mahapatro*. (See Column 5, Lines 11-24 and Column 6, Lines 33-44) Thus, *Mahapatro* fails to disclose, teach, or suggest "receiving a list of required completion dates, *each completion date specifying the completion date for the development of a corresponding product in the plurality of products*," as recited in Claim 1. Both *Dietrich* and *Miller* fail to make up for these deficiencies of *Mahapatro* and thus, the proposed *Mahapatro-Dietrich-Miller* combination is insufficient to support these rejections.

As another example, *Mahapatro* fails to disclose, teach, or suggest "*receiving, for each product in the plurality of products, a project definition of a project for developing the*

product,” as recited in Claim 1. Even assuming for the sake of argument only that the *tasks received for the single project* by the system in *Mahapatro* could be equated to the project definition recited in Claim 1, *Mahapatro* would still fail to disclose, teach, or suggest “receiving, **for each product in the plurality of products**, a project definition of a project for developing the product,” as recited in Claim 1. Both *Dietrich* and *Miller* fail to make up for this deficiency of *Mahapatro* and thus the proposed *Mahapatro-Dietrich-Miller* combination is insufficient to support these rejections.

As another example, *Mahapatro* fails to disclose, teach, or suggest “automatically generating a schedule comprising **all tasks for all projects**, the schedule **allocating the resources such that each resource is allocated at a level less than or equal to its capacity**, the schedule also **scheduling tasks that require materials from outside parties at a time when such materials will be available**,” as recited in Claim 1. In the current Office Action, the Examiner rejects Claim 1 under 35 U.S.C. § 103(a) as being unpatentable over a proposed combination of three references—*Mahapatro*, *Dietrich*, and *Miller*. However, in the explanation of the rejection of Claim 1 in the current Office Action, the Examiner makes no mention of *Miller*. In the previous Office Action, the Examiner acknowledged that *Mahapatro* does not “teach generating a schedule allocating all resources such that each resource is allocated at a level less than or equal to its capacity.” (previous Office Action, Page 3) However, the Examiner argued in the previous Response that *Miller* accounts for the acknowledged deficiencies of *Mahapatro*.

Even though the current Office Action does not mention the relevance of *Miller* to Claim 1, Applicants will assume for purposes of this Response that the Examiner has not changed positions regarding the acknowledged deficiencies of *Mahapatro* and the alleged relevance of *Miller*. As Applicants demonstrated in the previous Response, *Miller* fails to account for the acknowledged deficiencies of *Mahapatro*. In particular, nowhere does *Miller* disclose, teach, or suggest “automatically generating a schedule comprising **all tasks for all projects**, the schedule **allocating the resources such that each resource is allocated at a level less than or equal to its capacity**, the schedule also **scheduling tasks that require materials from outside parties at a time when such materials will be available**,” as recited in Claim 1.

One portion of *Miller* cited by the Examiner in the previous Response merely states, “The input data provided to the computing system may also include resource requirements for the various tasks as, for example, the number of workers having particular skills or machines of a certain type required to perform each particular task.” (Column 1, Lines 46-50) This and another cited portion of *Miller* apparently disclose nothing more than merely assigning those with certain skills to certain tasks. This certainly does not disclose, teach, or suggest “automatically generating a schedule comprising *all tasks for all projects*, the schedule *allocating the resources such that each resource is allocated at a level less than or equal to its capacity [the capacity of the resource as a function of time]*, the schedule also *scheduling tasks that require materials from outside parties at a time when such materials will be available*,” as recited in Claim 1.

As another example, the Examiner now acknowledges that *Mahapatro* fails to explicitly teach “receiving a list of materials available from outside parties distinct from the enterprise and a schedule of availability of the materials available from the outside parties,” as recited in Claim 1. However, the Examiner argues that *Dietrich* does teach this limitation. Whether or not this is true, the above-described deficiencies of both *Mahapatro* and *Miller*, and *Dietrich*’s failure to account for those deficiencies, are sufficient to patentably distinguish Claim 1 from the proposed *Mahapatro-Dietrich-Miller* combination. Thus, the proposed *Mahapatro-Dietrich-Miller* combination is insufficient to support these rejections.

B. At Least the Proposed *Mahapatro-Dietrich* Combination is Improper

The rejection of Applicants' claims is also improper because the Examiner has not shown the required teaching, suggestion, or motivation in *Mahapatro*, *Dietrich*, or in the knowledge generally available to those of ordinary skill in the art at the time of the invention to combine or modify *Mahapatro* or *Dietrich* in the manner the Examiner proposes. The rejected claims are allowable for at least this reason.

Applicants respectfully submit that the Examiner's conclusory assertion that it would have been obvious to combine the teachings of *Mahapatro* with the teachings of *Dietrich* to arrive at Applicants' invention is entirely insufficient to support a *prima facie* case of obviousness under 35 U.S.C. § 103(a) under the M.P.E.P. and the governing Federal Circuit case law.

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed above, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention. It is clear based at least on the many distinctions discussed above that the proposed *Mahapatro-Miller-Dietrich* combination does not, taken as a whole, suggest the claimed invention, taken as a whole. Applicants respectfully submit that the Examiner has merely pieced together disjointed portions of unrelated references to reconstruct Applicants' claims.

The M.P.E.P. sets forth the strict legal standard for establishing a *prima facie* case of obviousness based on modification or combination of prior art references. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references where combined) must teach or suggest all the claim limitations." M.P.E.P. § 2142, 2143. The teaching, suggestion, or motivation for the modification or combination and the reasonable expectation of success must both be found in the prior art and cannot be based on an applicant's disclosure. *See Id.* (citations omitted). "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art" at the time of the invention. M.P.E.P. § 2143.01. Even the fact that references *can* be modified or combined does not render the resultant modification or combination obvious unless the prior art teaches or suggests the desirability of the modification or combination. *See Id.* (citations omitted). Moreover, "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art." M.P.E.P. § 2143.03 (citations omitted).

The governing Federal Circuit case law makes this strict legal standard even more clear.¹ According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 U.S.P.Q.2d at 1432. See also *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (holding a *prima facie* case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) ("Conspicuously missing from this record is any evidence, other than the PTO's speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at" the claimed invention.). Even a determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or combination is not sufficient to establish a *prima facie* case of obviousness. See *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, "The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art." M.P.E.P. § 2142. The governing Federal Circuit cases are equally clear. "A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is

¹ Note M.P.E.P. 2145 X.C. ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.'" *In re Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted). In *In re Kotzab*, the Federal Circuit noted that to prevent the use of hindsight based on the invention to defeat patentability of the invention, the court requires the Examiner to show a sufficient motivation in the prior art to combine the references that allegedly create the case of obviousness. *See id.* *See also, e.g., Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board, explaining that the required evidence of such a teaching, suggestion, or motivation is essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (emphasis added) (citations omitted).

With regard to the proposed *Mahapatro-Dietrich* combination, the Examiner states, "Since both Mahapatro and Dietrich teach a scheduling system wherein products are developed according to the availability of resources, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Dietrich's external availability schedule for materials into Mahapatro's scheduling system to account for all resources available to generate a specific product thereby increasing the efficiency of the scheduling system." (Office Action, Page 4). First, Applicants respectfully submit that the Examiner has merely pointed to an alleged advantage of modifying the system disclosed in *Mahapatro* with the system disclosed in *Dietrich*, which is not found in the prior art and is clearly insufficient to provide the requisite teaching, suggestion, or motivation for combining these references under the M.P.E.P. and the

governing Federal Circuit case law. Second, Applicants respectfully submit that this alleged advantage would not even be achieved by combining these references in the manner the Examiner proposes. In particular, Applicants respectfully disagree that “incorporat[ing] Dietrich’s external availability schedule for materials into Mahapatro’s scheduling system to account for all resources available to generate a specific product thereby increasing the efficiency of the scheduling system,” as asserted by the Examiner. On the contrary, accounting for external resources in a scheduling system would likely increase the computational complexity of the scheduling system, making the scheduling system less efficient. While it may be true that the resulting schedule of a scheduling system that accounts for resources external to an enterprise would be more complete, the Examiner is simply using Applicants’ invention as a blueprint for piecing together these references.

In fact, based on the Examiner’s reasoning, it would be obvious to combine any two references that deal with scheduling resources for product development. This is clearly inconsistent with the M.P.E.P and controlling Federal Circuit case law, which requires a showing of a specific teaching, suggestion, motivation for combining or modifying the references in the references themselves or in the knowledge generally available to one of ordinary skill in the art at the time of invention. The Examiner has not pointed to any portions of either *Mahapatro* or *Dietrich* that would teach, suggest, or motivate one of ordinary skill in the art at the time of invention to incorporate the particular resource allocation methods disclosed in *Mahapatro* with the particular allocation method for generating a production schedule disclosed in *Dietrich*.

Accordingly, since the prior art fails to provide the required teaching, suggestion, or motivation to combine *Mahapatro* with *Dietrich* in the manner the Examiner proposes, Applicants respectfully submit that the Examiner’s conclusions set forth in the Office Action fall well short of the requirements set forth in the M.P.E.P. and the governing Federal Circuit case law for demonstrating a *prima facie* case of obviousness. Thus, Applicants respectfully submit that the Examiner’s proposed combination of *Mahapatro* with *Dietrich* appears to be merely an attempt, with the benefit of hindsight, to reconstruct Applicants’ claims and is unsupported by the teachings of *Mahapatro* and *Dietrich*. Applicants respectfully submit that the rejection must therefore be withdrawn.

Furthermore, as demonstrated above, Applicants respectfully submit that *Mahapatro* (as well as *Miller*, for that matter) is wholly inadequate as a reference against independent Claim 1. Thus, even if *Dietrich* discloses the portions of Claim 1 that the Examiner suggests, and even assuming for the sake of argument that there was the required teaching, suggestion, or motivation to combine *Mahapatro* with *Dietrich* as the Examiner proposes, the proposed *Mahapatro-Miller-Dietrich* combination would still fail to disclose, teach, or suggest the limitations specifically recited in independent Claim 1, as is required under the M.P.E.P. and the governing Federal Circuit cases for a *prima facie* case of obviousness.

For at least these reasons, Applicants respectfully request reconsideration and allowance of independent Claim 1 and its dependent claims. For substantially similar reasons, Applicants respectfully request reconsideration and allowance of independent Claims 3 and 31, and their dependent claims.

II. No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the *Mahapatro*, *Dietrich*, and *Miller* references. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are sufficient to overcome the obviousness rejections.

Conclusion

Applicants have made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicants respectfully request full allowance of all pending claims.

If the Examiner believes a telephone conference would advance prosecution of this case in any way, the Examiner is invited to contact Christopher W. Kennerly, Attorney for Applicants, at the Examiner's convenience at (214) 953-6812.

Applicants believe no fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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